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SOVIET TACTICAL SURPRISE: THE DOCTRINE AND HOW TO
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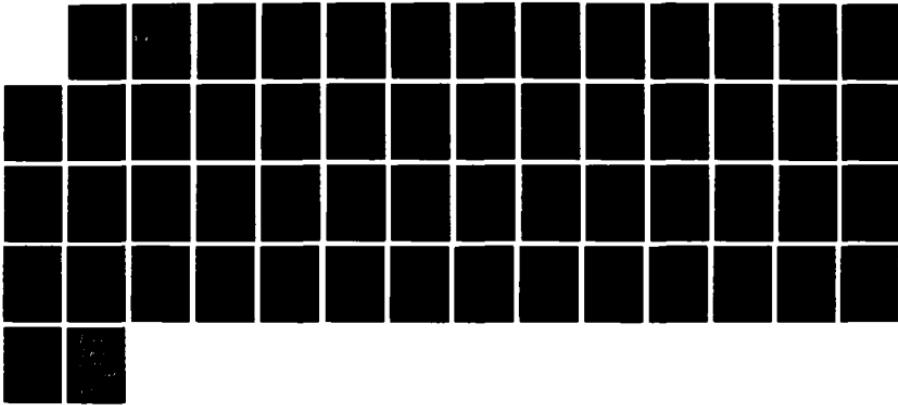
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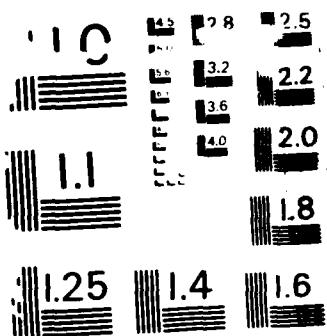
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SOVIET TACTICAL SURPRISE: THE DOCTRINE AND HOW TO COUNTER IT.

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by

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SOVIET TACTICAL SURPRISE: THE DOCTRINE AND HOW TO COUNTER IT.

by

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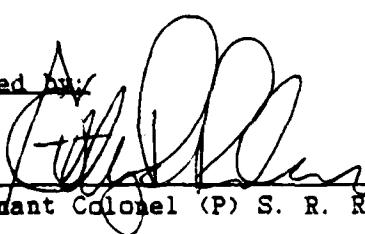
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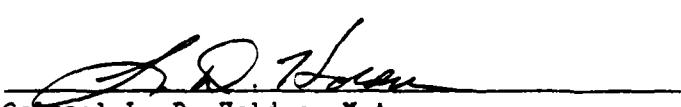
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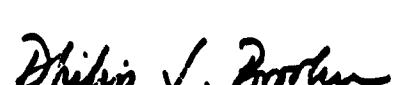
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ABSTRACT

Soviet Tactical Surprise: The Doctrine and How to Counter It.
by Major Joseph A. Bolick, United States Army, 47 pages.

➤ This study examines Soviet surprise within the context of tactical warfare. It assesses Soviet military art in relationship to their current surprise doctrine, defines the elements of surprise and reviews their historical use. It also discusses the advantages of surprise operations and those the Soviets expect if used against NATO.

The main body of the study is concerned with how the Soviets will achieve surprise and how we can prevent or counter it. A discussion of Soviet organization, methods of execution, counter-reconnaissance, radio electronic combat, intelligence collection, and other items such as the use of deception to support surprise operations is included. It states that U.S. commanders and intelligence personnel must understand the Soviets' options, presents ways to improve the intelligence system so it can detect surprise, and discusses actions leaders can take to assist in this process. The final section presents ways to counter surprise.

(The study concludes that Soviet forces will use surprise to support their tactical operations. This tactical use will be integrated with the operational and strategic surprise plan. US detection, prevention and countering will depend on intelligence and operations personnel understanding the battlefield and its ambiguities. *Very good material*

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SOVIET SURPRISE DOCTRINE: THE MILITARY ART BASE.

The Soviet military has devoted great effort over many years to the study of surprise in warfare. Comments by Soviet Maj. Gen P. T. Kunitskiy, writing in the Russian Voyenno-Istoricheskiy Zhurnal in October of 1985 concerning operations in the Great Patriotic War, indicates the Soviet's regard for surprise:

"Victory on the battlefields during the years of the Great Patriotic War was brought about by numerous factors. One of the important places among them was held by the achieving of surprise. Surprise, unexpected actions by the Soviet troops frequently stunned the enemy, paralyzed its will, deprived the enemy of the possibility of organized resistance and thereby created conditions to win the battle. engagement and operation with equal or even smaller forces, in a short period of time and with minimum losses. This clearly shows the high professional maturity and leadership skill of the Soviet commanders and their ability to creatively apply in practice the principles of military art. (1)

Surprise is defined as "a phenomenon produced by unexpected vigorous action by the enemy, action which exerts a powerful psychological effect, disrupting one's inner equilibrium and thus depriving one of the ability to react quickly and effectively to a threatening danger." (2) Surprise can also be produced, for example, by the concealed withdrawal of enemy forces from defended positions on which friendly forces have directed fire preparation and have initiated an attack. Enemy inactivity in a situation in which actions were expected can also constitute surprise. (3)

The Soviet definition and doctrine for surprise is a blending of theoretical ideas and combat experiences derived from study of past military

operations. The Soviet military believe that all things can be examined scientifically. They contend that there are "Laws of War", just as there are "Laws of Physics" which do not change and which govern the outcome of war. The Soviets believe that if one knew all the "laws" they could properly predict the outcome of any war before its start. The Soviets use the history of World War Two and these theories to try and capture, in a laboratory method, these laws and reapply them under modern conditions.(4)

The Soviet application of these scientific laws and principles is called military art. Soviet military art is broken down into three levels: strategic, operational, and tactical. Surprise is addressed in the same way, with the planning and execution being interwoven through and interdependent among the levels.

Strategic surprise is accomplished on a large scale. It includes both political and military methods of deception to aid its achievement. Politically items such as diplomatic deception of a country's intentions and timing of actions are deemed essential to strategic surprise. Militarily, strategic surprise is achieved by supporting the political deception with controlled and secret movement of large amounts of troops. Operational surprise is a degree lower than strategic surprise and involves surprise in individual theaters of military operations.(5) Operational surprise consists of items such as "misdirecting the opponent's calculation of the time, strength, direction, speed, and manner of possible attack."(6) Tactical surprise is surprise accomplished by operational units and formations. It normally encompasses the unexpected use of weapons or techniques previously unseen by one's adversary.(7)

SOVIET SURPRISE DOCTRINE: THE THEOREICAL BASE

The Soviets are influenced by both Eastern and Western theories and military experiences. The Eastern theoretical basis of their present surprise doctrine comes from the writings of Mao Tsetung and Sun Tzu. The Chinese theorist and warrior Mao Tsetung indicated that deception and surprise were two key principles to war:

"To have misconceptions and to be caught unaware may mean to lose superiority and initiative. Hence, deliberately creating misconceptions for the enemy and then springing surprise attacks upon him are two ways-indeed two important means-of achieving superiority and seizing the initiative.(8) These two points-creating misconceptions among the enemy and springing surprise attacks on him-means transferring the uncertainties of war to the enemy while securing the greatest possible certainty for oneself and thereby gaining superiority, the initiative and victory."(9)

These principles of deception and surprise in Chinese writings, however, may not have originated with Mao Tsetung. There is evidence that he borrowed this and many of his other concepts from the writings of Sun Tzu.(10) Sun Tzu's observations on surprise in The Art of War, are:

- all warfare is based on deception.
- therefore, when capable, feign incapacity; when active, inactivity.
- when near, make it appear that you are far away; when far away, that you are near.
- offer the enemy a bait to lure him, feign disorder and strike him.(11)

The two major western theorists who influenced the Soviets are Carl von Clausewitz and Baron de Jomini. Clausewitz, in his thesis On War, discussed surprise as follows:

"the universal desire for relative numerical superiority-leads to another desire, which is consequently no less universal: that to take the enemy by surprise. This desire is more or less basic to all operations, for without it superiority at the decisive point is hardly conceivable."

Surprise therefore becomes the means to gain superiority, but because of its psychological effect it should also be considered as an independent element. Whenever it is achieved on a grand scale, it confuses the enemy and lowers his morale.

We suggest that surprise lies at the root of all operations without exception, through in widely varying degrees depending on the nature and circumstances of the operation." (12)

Baron de Jomini observed that:

"this [surprise] is an operation by no means to be despised in war, although it is rare, and less brilliant than a great strategic combination which renders the victory certain even before the battle is fought." (13)

Jomini in his prescriptive on a practical approach to war further stated:

"that a surprise does not consist simply in falling upon troops that are sleeping or keeping a poor look-out, but that it may result from the combination of a sudden attack upon, and a surrounding of, one extremity of the army. In fact, to surprise an army it is not necessary to take it so entirely unawares that the troops will not even have emerged from their tents, but it is sufficient to attack it in

force at the point intended, before preparations can be made to meet the attack."(14)

From the writings of these major theorists the Soviets have adopted the following concepts:

- all warfare is based on deception.
- surprise should be considered as an independent element.
- misconception leads to surprise, which results in loss of superiority and initiative.
- surprise thus leads to superiority and seizing of the initiative.
- desire for numerical superiority leads to the desire for surprise, for this is the only way to achieve superiority at the decisive point.
- surprise not only gives numerical superiority but also destroys enemy morale also.
- surprise should not be despised.
- surprise is gained by a sudden attack at the decisive point before enemy preparation can be made.

SOVIET SURPRISE DOCTRINE: A HISTORICAL EXAMPLE

The following passage describing the Sandomierz-Silesian Operation in 1942 reflects how the Soviets incorporated theory into practice and the extent to which they went to surprise the German forces:

In the preparations for the Sandomierz-Silesian Operation, a false maneuver was successfully employed by the IV Guards Tank Corps in the area of the 60th Army on the Tarnow-Krakow axis. This corps simulated the concentrating of tank army troops. For the verisimilitude of concentration of large masses of tanks here, for a period of 2-3 days the corps was moved to the Debica area and then secretly shifted to

the Sandomierz bridgehead from whence it launched the main thrust. For carrying out the significant amount of work involved in simulating a false concentration area, a combat engineer brigade, two combat engineer battalions, a rifle and an artillery regiment and a tank battalion were employed. The subunits with their own forces made and set out mock-ups of 400 tanks, 500 motor vehicles and 1000 guns. Leadership over the false concentration was provided by "staffs of the tank army and tank corps" which were specially organized by the staff of the 60th Army and these were given field post office numbers. They had radios and set up false radio nets. The radios of the formations which had left the other sector of the front were temporarily left at their previous positions and continued operating actively. In the false concentration area, quartermaster troops visited areas of the terrain, assigned spaces for the troops and warned the local population of the forthcoming evacuation to the rear in line with the pending arrival of a large number of troops here. The local population was involved in building roads and laying column tracks which were provided with road signs and indicators. Areas where dummy equipment was located were carefully secured. During the night bonfires were lit in various places and the field kitchens operated. For simulating the movement of tanks, loudspeakers were employed transmitting recordings of operating tank engines. "Lagging" tanks which simulated breakdowns and overhauls were set out on the approach routes to the false concentration area. The roads leading to the "concentration area" were blocked by traffic control barriers manned by troops in tank uniforms. Scores of real tanks at night moved along the roads and over fields, leaving track prints while motor transport with headlights on moved through the false areas. Several days before the start of the operation, in the zone of the 60th Army, the work pace was intensified by reconnaissance groups, the nighttime reconnaissance sweeps were more frequent, the moving of artillery to position areas and registration fire were simulated. All these measures distracted the enemy's attention from

the main sector and this significantly ensured the successful carrying out of the Sandomierz-Silesian Operation.(15)

This Soviet operation, as became the norm for operations toward the end of the Second World War, involved the commitment of extensive resources to achieve surprise. From May through August 1942, German intelligence received false information on the concentration in various sectors of 255 rifle divisions, 3 tank armies, 6 tank corps, 6 cavalry divisions, 54 tank brigades, 2 army staffs and 30 artillery regiments. (16)

The Soviets continued to refine and exploit the experiences of late 1942 and 1943 improving greatly their capability for the conduct of surprise operations at all levels of war. They learned that the fate of the grandest surprise operation rested on the effective execution of hundreds of mundane tasks.(17)

Front and army staffs planned for operational surprise. They allocated forces and equipment, specified timing, and assigned responsibility for supervision of the operation. Subordinate headquarters prepared plans to support the operational plan. The most detailed operational planning was conducted at army level. The army plan sought to fulfill the higher level concepts by designating specific measures allocated to individual units.

(18)

Soviet surprise doctrine takes a multi-echelon approach. The front and army staffs develop plans and the divisions and lower units execute them. Soviet surprise operations are not an after thought in the development of the plan. It is an organic part of the planning process.

THE ELEMENTS OF SURPRISE

Barton Whaley in his book Stratagem, identifies and discusses five major elements of surprise: intention, time, place, strength, and style. A review of Soviet writings indicates they also consider these as the major elements. Intention is the fundamental preference or choice that determines whether a given war, campaign, or battle changes from a possibility to reality. Intention is a precondition for the other varieties of surprise and could be considered the rationale or reason for the attack. The second element is time, which refers to the unexpectedness of the time of the attack. The third element is place. Place refers to the point or area threatened, or to the direction or axis of operation. Depending on the type of forces used, this can also relate to the target or where the attack will occur. The fourth element strength refers to the amount of military force committed to the operation. Finally, the last element is style. Style is the form that the military operation takes or the fashion in which it is carried out. The idea of style is normally viewed as looking at and comparing the operation with known doctrine. (19)

USE OF THE ELEMENTS

Barton Whaley in Stratagem, also discusses the relative importance of these different elements. His study, which examined 205 battles where surprise was considered, reveals that the element of place was used most

often at 73%. (See table at Appendix A) Surprise with regard to time and strength are next at 65% and 58%. The two factors that appear to be the most difficult to accomplish and therefore the least used are intent and style at 33% and 26% respectively. This trend is true for battles at both the strategic and tactical level, with the only exception being intent which appears to be employed more at the strategic level than at the tactical. Additionally, the element of style was slightly easier to accomplish at the tactical level than at the strategic level. (20)

Whaley's study also covered the relationship between the use of these elements and victory in combat. The table at Appendix B shows the relationship between the use of the different elements (by the United Kingdom, Germany, Soviet Union and United States) and victory. The average frequency any element was used to assist in achieving victory for any country is about 43% of the time. The elements of time, place, and strength exceeded this for almost all countries. The element of style is well below average. The element of intent for the Germans and Soviets is at about 40% while well below that for the United Kingdom and the United States. (21)

The data on the United States indicates two unique observations. First, the element of place was used extensively and was evident in victorious battles 73.3% of the time. Secondly, the element of intent was not used very successful in obtaining victories for its percentage is the lowest among the nations considered. (22)

It is very rare that any single element of surprise was used by itself. The table at Appendix C indicates that in the test battles the more

elements of surprise that were employed the higher the likelihood of success. When one or more element was used, victory was achieved 90.8% of the time. For two or more it rose to 93.9%, and for three and above victory resulted 98.8% of the time. Of particular note is that when the Soviets used three or more elements of surprise they were able to win 100% of the time.(23)

ADVANTAGES OF SURPRISE

Study of the many combat experiences from the Second World War has shown the Soviets they can, through surprise, achieve certain advantages. The Soviets believe that the use of surprise can result in the early defeat of the enemy while employing a smaller force at a lower cost. They feel surprise can change the correlation of forces thus lowering the enemies' capability to respond at the critical point. Surprise is used to assist in the undetected massing of forces to achieve a breakthrough. This breakthrough will result in a loss of control by an opponent, panic, and a quick destruction of enemy morale, making it impossible for them to execute any type of countermeasure.(24) Simply put, the Soviets will use surprise because history has shown them it results in quick and cheap victories.

ADVANTAGES OF SOVIET USE OF SURPRISE AGAINST NATO

The Soviets contend that surprise will confer five advantages to them if they attack NATO. First, NATO's reinforcement plans will be preempted and rendered largely unworkable. Considering the present deployment of forces, surprise may prevent some NATO corps from occupying FEBA positions. Surprise will hamper the emplacement of NATO's extensive obstacle and field fortification plan which is designed to threaten the viability of Soviet tactical and operational momentum. Instead of having to conduct difficult and costly breakthrough operations, Soviet surprise will result in a series

of meeting engagements--a form of combat for which they train intensively, but which is ignored by most alliance armies.(25)

The second advantage is that surprise is seen as a force multiplier making it possible to achieve a limited strategic objective with much smaller forces. Using surprise may mean the Soviets do not have time for complete mobilization. However, since there is no need for breakthrough operations, there is also no need for large concentrations and strong second echelons at every level. The absence of these large concentrations of forces undermines the rational of both NATO's operational nuclear forces and the Deep Strike plans which target them. (26)

Surprise will also make it easier to insert major groupings of forces into the enemy's rear. The concept of operational maneuver groups has become an essential feature of contemporary Soviet operational planning. Their introduction will result not only in massive losses of combat support and combat service support capabilities, but also preclude effective execution of counter-measures.(27)

The fourth advantage of surprise will be a lessening of the logistical burden and reduction of the number of casualties in offensive operations. Soviet research shows that, in 1944-45, tank armies involved in fast-moving maneuver warfare and advancing at 16-45 kilometers a day suffered only one-third the loss in men and two-third the tank losses (mostly easily repairable mechanical breakdowns) of tank armies advancing 4.5-13 kilometers per day. They also used only one-third the amount of fuel and one-fourth the quantity of ammunition when compared to the armies involved in fighting through a prepared, balanced defense.(28)

Finally, it has been suggested that it will be just as important for the USSR to surprise the Warsaw Pact as to catch NATO unaware. Surprise will prevent some reluctant Pact allies from opting out and leaking Soviet intentions to the West. The Soviets believe it would be just as much to their advantage to give the ordinary soldiers and populations of these allies little time to reflect on the need for and desirability of war.(29) Ultimately, achieving surprise is of vital importance to the Soviets; it may be the difference between success or failure against NATO's defenses.

ACHIEVING SURPRISE

The Soviets will try to achieve surprise through the use of offensive surprise actions, actions which support these offensive actions, and deception operations. All of these are conducted to achieve one or more of the five elements of surprise. These actions are reflected in present Soviet doctrine and are integrated into the operation via the deliberate planning process.

OFFENSIVE ACTIONS TO ACHIEVE SURPRISE

The Soviet organization and execution of operations are well suited for the achievement of surprise in offensive actions. They train to conduct meeting engagements by attacking from the march.(30) Their march formation is a self contained fighting unit that is capable of bringing massive combat power to the decisive point quickly. The Soviets, along with march organization, train to use speed of action (31) from the march to achieve surprise. The training norm of the Advanced Guard Commander is to be able to commit from the march within sixty minutes. 31 BTRs, 13 Tanks, 6-120 mm Mortars, 18-122 mm Howitzers, 2 Antiaircraft Guns and 4 ATGMs.(32) Many Westerners believe that flexibility is diminished by tactical drills.(33) However, a close examination of these drills and their use indicates that they facilitate the rapid application of combat power resulting in the destruction of enemy morale by sudden shock

action.(34) This destruction of the enemy's morale is considered one of the major objectives of the surprise attack as it allows further exploitation with lower losses.

To assist in the achievement of surprise, the Soviets plan to destroy hostile reconnaissance means(35) while preventing the penetration of their main force by enemy reconnaissance.(36) The advanced guard will strip away all enemy ground recon assets so the moving main body can quickly commit against an unprepared force.

To assist the advance guard in this counter-reconnaissance mission the Soviets have developed their electronic warfare capabilities into an integrated system called radio-electronic combat (REC). From the U.S. perspective, REC doctrine adds a new dimension to electronic warfare. The Soviets will use signal intelligence, direction finding, intensive jamming, deception, and destructive fires to attack the US ability to respond through our means of control. REC will be used to limit, delay, or nullify our use of the electronic command and control system, while protecting his through electronic counter-countermeasures. The major known targets of this system are US command posts, observation posts, communication centers, and radar stations in addition to point targets that may jeopardize advancing Soviet forces, e.g., dug-in tanks, antitank guided missiles emplacements, bunkers, and direct fire guns.(37) REC will use the combined destruction capability of artillery, direct fire weapons, and jammers directed by their collection efforts to ensure command and control is not available to counteract the effects of a surprise attack.

Along with attacking from the march and destruction of recon elements, the Soviets can be expected to change the direction of their attacks "suddenly" to achieve surprise.(38) This rapid redirection of the attack is part of the drills the Soviet unit practice. Upon contact the Soviet commander has the option to use one of three forms of maneuver. The first, the frontal attack, is directed against the enemy's frontline forces to penetrate his defenses along single or multiple axes. The frontal attack, by itself, is the least preferred form of maneuver. Normally it is used in combination with a flank attack or envelopment. The second, the flank attack, is conducted to strike enemy forces in their flank or rear at a relatively shallow depth. The final is the envelopment which is a deeper attack that causes the enemy to turn and fight in a new direction.(39) Selection of the type of attack is made by the tactical commander to support the tactical situation and the operational intent of the surprise operation.

This changing of the attack axis may be supported by the use of surprise regrouping of forces.(40) The Soviet soldier is drilled in night marches and attacks. He is expected to be able to move secretly from one location to another at night to achieve the desired correlation of forces at the critical point. In addition to attacks conducted at night and from unexpected directions, he will attack during poor weather conditions and alter the battlefield environment through the use of smoke or other means.(41)

Along with using the environment to support his offensive action he will constantly change his methods of action, create new organizations, and

ensure success by having his officers leading well forward. Present writings indicate the Soviets are concerned that repetition of the same procedures and methods, including successful ones, will lead to routine. They stress that the enemy will quickly be able to predict these routine tactics and will organize effective countermeasures. The constant search for new versions of carrying out combat missions is considered one of the most important actions the commander and staffs perform. Several examples stressed are changing the time of the attack, changing the use of and depth of artillery support, and attacking without the use of artillery.(42)

Current writings indicate that emerging Soviet tactical doctrine and organizations are being focused on the deep battle which may result from successful surprise. A more "balanced" mix of armour and infantry is being structured into maneuver forces. Artillery and helicopters are being strengthened to increase fire power. Finally, a shift from bypassing to exploiting built-up areas is being noted in doctrinal literature.(43)

To ensure success the Soviets place their commanders at all levels well forward. This placement allows for the initiative and flexibility required to achieve surprise. It is wrong to assume that there is no initiative within Soviet doctrine. Initiative is a valued skill, but it is only sought among regimental commanders and above. Flexibility is also prized, but as a tool of "operational art" not tactics. Flexibility is shown by task organizing to fit existing situations. One can "template" general concepts at the tactical level and tactical battle drills predictably line up forces like players on a football field. However, commanders do not have to

follow templated battle drills or inflexible patterns at the operational level. They can and are now encouraged to show initiative.(44)

ACTIONS DESIGNED TO SUPPORT SOVIET SURPRISE OPERATIONS

Soviets doctrine and organizations are designed to ensure offensive surprise actions are successful. Surprise is supported by maneuver and special units designed to ensure the mission is accomplished quickly and with the minimum loss of lives and materials. The first concern is to ensure the enemy is seen as he really is, without exaggeration or understatement. The Soviets believe that underestimating the enemy capability will result in lowered vigilance, in divorcing the plan of action from the real situation and, ultimately, in unjustified losses and failure. Overestimation of enemy capabilities will result in indecisiveness and the undermining of the confidence of one's own force.(45)

Soviet organizations, at all levels, are designed to ensure the commander is provided enough information to see the enemy as he is. At the front level the commander has an intelligence regiment, a radio intercept regiment, a radio and radar intercept regiment, and a diversionary brigade, as well as his staff to provide information on the enemy. At the combined arms and tank army level the commander has an intelligence battalion, a long-range reconnaissance company, a radio and radar intercept battalion, and a radio intercept battalion to assist him in this task. Divisions are likewise provided with reconnaissance battalions.(46)

The Soviets, while expending large amounts of resources on intelligence gathering, realize that they will never have the complete picture. To assist the commander in learning to cope with this situation and achieve surprise, he and his troops are trained with little information.(47) Achieving surprise requires the commander to act with great boldness, initiative, and audacity.(48) The ability to react quickly to changing situation requires the commander to make decisions quickly. This training technique allows for the development of this trait in peacetime. Furthermore, this training technique also ensures the commander promptly and correctly develops the situation.(49) The correct development of the situation and speed of movement results in achievement of surprise while poor development and slow response results in failure.

The Soviets realize that the moral confusion caused by surprise has time limits. The results of surprise must be exploited as quickly and as completely as possible at the earliest stage. Surprise must be capitalized on to prevent the enemy from recovering and returning to his former state.(50) To ensure this the Soviets stress maintaining combat readiness. This combat readiness is divided into three parts; training of the soldier, equipment readiness and support design, and the morale of the soldier.(51)

To maintain the tempo of the offensive gained through surprise, Soviet training is repetitive. The aim of the training is the development of instinctive reflexes to cope with any situation. The training concentrates on field exercises under realistic conditions. Often, while training in NBC warfare, the troops use live chemical and radio-active agents under credible conditions. The Soviets also place great importance on physical

conditioning. Exercise, calisthenics, diet, and organized sports are all factored into ensuring the soldier can continue the operation.(52)

The second part of combat readiness is equipment readiness and support design. Soviet equipment is designed to be rugged and easily maintained. The Soviet system of standardization is extensive and effective. This extensive standardization has reduced the volume of repair parts and improved the Soviets' ability to repair forward through cannibalization. To assist in repair of equipment, the Soviets have spent enormous sums of money to develop a modern and highly mobile logistic support system. Materiel handling equipment is increasing in both quantity and quality. From division to company, material and servicing facilities operate from wheeled vehicles. Critical supplies such as ammunition are boxed and uploaded on support and combat vehicles. These measures are all designed to support a continuous, rapid offensive.(53)

The final part of maintaining combat readiness is maintaining the morale of the soldier. The Soviets have within their organization a political officer whose duties include promoting the authority of the commander, raising troop morale, developing a sense of personal responsibility for the condition of their equipment and enhancing troop effectiveness.(54) The Soviets' system of maintaining combat readiness is designed to support surprise by ensuring continuous operation once it is achieved.

DECEPTION IN SUPPORT OF SOVIET SURPRISE OPERATIONS

Deception, the final component, is the basis for all surprise operations. The Soviets believe that surprise cannot be achieved without effective deception. Soviet deception practices have their roots in Tsarist Russia where deception, secrecy, and deviousness were major factors in maintaining the Tsar's power. In Soviet Russia today these traits are an integral part of all military decisions. Westerners, especially Americans, have a difficult time relating to this characteristic because in our society trustworthiness and openness are admired. This dichotomy induces a vulnerability in Americans to deception practices and this vulnerability can be disastrous at the operational and tactical levels.(55)

Prior to the German invasion, the Soviets recognized deception as the primary way to achieve surprise. According to the Regulations of the Red Army in 1939, deception involved concealment, simulation, misinformation, and demonstrations or feints. All of these methods were subsumed under the single Russian word, maskirovka. The Soviets have retained this definition to the present time.(56)

According to Soviet doctrine, as with surprise, the commander includes maskirovka in his decision. This decision occurs early in the planning process. The normal Soviet planning process begins with the task, generally an order received from higher command level. The commander or chief of staff gives the task to the principal staff officers, who prepare suggestions for the commander. After hearing these suggestions, the commander makes his decision. This decision is usually very concise, often

a map overlay with a few paragraphs of explanation. On the basis of this decision, the staff develops formal plans. As part of the commander's decision, maskirovka is integrated in the formal planning process. Since 1943, the Field Regulation has emphasised the importance of maskirovka by making it a command responsibility.(57)

Soviet military art includes three levels of maskirovka. At the tactical level, units from battalion through division conduct deception, usually concentrating on concealment. At the operational level, armies and fronts develop plans to achieve operational surprise. Finally, at the strategic level, the Supreme High Command and the General Staff develop maskirovka for strategic operations and campaigns. (58)

Soviet doctrine does not specify a standard organizational concept for maskirovka operations. The commander organizes his effort as appropriate for a given operation.(59) The Soviets are aware that whatever is done must appear highly plausible to an enemy, and conform to both Soviet doctrine and hostile reasonable expectation.(60) Methods include the use of the following to deny or confuse enemy observation:(61)

TECHNIQUE

TYPES OF CAMOUFLAGE

Optical Light Sound Radar Heat Infrared Radio Operation
of forces

Disruptive painting	X		X	X
Nets	X	X	X	X
Dummies	X		X	X
Decoys	X	X	X	X

TECHNIQUE	TYPES OF CAMOUFLAGE						
	Optical	Light	Sound	Radar	Heat	Infrared	Radio Operation of forces
Change in indicators	X	X	X	X	X		
Feigned activities	X	X	X	X	X	X	X
Smoke	X	X					
Blackouts/dimouts	X	X		X	X		
Vegetation, incl. flooding		X			X	X	X

Using these camouflage methods, the commander of each battalion, company, artillery battalion, and battery personally organizes the camouflage activities of his subordinate units. In doing so, he takes into consideration the forms and means of enemy reconnaissance, the revealing indicators of his unit, the camouflage properties of the terrain, weather, season, and time of day. The first assets the Soviet commander uses are the local conditions. He does not rely on sophisticated technical means of concealment but uses ingenuity and imagination to effectively employ local resources in the camouflage of his unit. Soviet forces use dense woods which contain concealing undergrowth for their defensive positions and assembly areas. Population points are favored camouflage locations and possess the additional advantage of giving protection from heat sensitive reconnaissance devices.(62)

Maskirovka consists of more than camouflage techniques. Feints, which are the intentional display of troop units and equipment with the purpose of giving the enemy a false picture of the unit's true intentions are a component of maskirovka. Also included is disinformation which consist of

the intentional dissemination of false information about one's forces, their composition, armament, fighting efficiency, and combat operations plans.

The final component is simulation which consists of reconstructing the tell-tale signs of troops and military installations by building dummy structures and employing mock-ups of armament, and military equipment as well as smoke agents, electronic, light and sound simulation.(63)

Concealment measures are accomplished by units of all branches of troops without special orders from the high command. Feints, simulation, and disinformation, however, are carried out only by the direction of or with the permission of the senior commander. This control is used to ensure the proper coordination of such operations with other friendly forces.(64)

The final aspect of Soviet camouflage, smoke, is discussed separately because of the importance the Soviets place on it. Smoke is used to support both concealment and simulation activities. The Soviets identify three types of smoke application: concealing smoke, blinding smoke, and decoying smoke. Concealing smoke is used to hamper or preclude enemy observation of unit operations. Blinding smoke is deployed on enemy locations and obscures the firing and observation points of the enemy thereby denying him the capability of conducting observation over the battlefield. Decoying smoke is employed in areas not occupied by friendly troops with the purpose of deceiving the enemy as to the actual location, movement, and intentions of friendly forces.(65)

There can be no doubt that the Soviets are serious about surprise. Their doctrine, organization, training, and national character plus historical examples indicate they will use it as a combat multiplier.

PREVENTING SURPRISE

Roberta Wohlstetter in her excellent book, Pearl Harbor: Warning and Decision, states there were four major factors which precipitated surprise at Pearl Harbor. They were the U.S.'s perception of what the enemy's options were, the intelligence organization designed to give warning, the "noise" surrounding the event, and the failure of leaders to correctly ascertain the intentions of the enemy. These factors are still valid today in addressing how to prevent surprise. Offensive actions, is added to the list, as the original four focus primarily on problems not solutions.

UNDERSTANDING THE SOVIETS OPTIONS

The tactical commander must understand what options are available to the Soviet forces. U S forces must realize that they cannot count on strategic warning. We might get it and we might be able to take useful preparatory action that would be impossible without it...However, since we cannot rely on strategic warning, our defenses must be designed to function without it.(66) Two problems must be overcome to accomplish this. First is rationalization of what an enemy can and cannot do. For example, surely an enemy would not do what we ourselves can not do; surely an enemy could not be doing what he is doing because there are more economical and more efficient ways of accomplishing the same goals; surely an enemy would not

conduct an operation in the manner he is because that would only indicate what he has already done. The list can go on and on. We must look at the situation as it is, not as we want it to be.(67)

The second factor which hinders surprise avoidance is military overconfidence deriving from the underestimation of the enemies capability.(68) The previous sections have detailed ways which the Soviets will try to achieve surprise. We must know our enemy, his style, his behavior and his doctrine, being extremely careful not to color our views by mirror imaging.(69) To do this requires careful study of modern methods of conducting combat operations as well as the potential character and features of a future war. The study of past wars indicates that surprise was achieved as the result of poor knowledge of the enemy, subjective mistakes in evaluating the intentions, plans, and superficial analysis of the measures directed toward surprise attacks.(70)

THE INTELLIGENCE ORGANIZATION FOR WARNING

The second requirement to prevent surprise is to have an intelligence system which can provide warning of surprise. In this respect the intelligence system is comprised of personnel, equipment, and the methods or procedures used to produce intelligence. Intelligence is defined as the product resulting from the collection, evaluation, analysis, integration, and interpretation of all available information which concerns one or more aspects of foreign nations or of areas of operations and which is immediately or potentially significant to military planning and

operations.(71) The present intelligence and electronic warfare system is capable of providing the intelligence to prevent surprise. However, to accomplish this the following procedures and considerations need to be considered.

First we must continue to develop and improve the use of our reconnaissance and intelligence gathering systems. Under present day conditions it is essential to have the ability to maintain continuous battlefield observation. The tactical commander must organize and conduct reconnaissance correctly. If we endeavor to learn everything about everything, there will be very little benefit since limited assets simply will not be able to accomplish all these tasks. Reconnaissance and intelligence gathering efforts should be prioritized to obtain current intelligence needed by the commander to accomplish his mission. Purposeful reconnaissance is one way to prevent surprise.(72)

The second consideration is the use of multiple discipline techniques to break down inconsistencies between indicators. The first step in doing this is to match current intelligence with basic intelligence and threat assessments. Basic intelligence provides the analyst with a reference of what an opponent can do. This includes the physical capabilities of equipment- ie. can a mobile radar deploy from A to B in a given time? In addition, it provides an organizational and doctrinal reference for current activity. These are particularly useful in evaluating the activity of the Soviet military which has minimized organizational variations and which does not encourage deviations from standard operating procedures. The second step is to determine which of the multiple means of collection

available at corps and below can be used to target an area. The third step is to determine if the present schedule allows for simultaneous coverage or if not to reschedule the sensors. The final step is making effective use of the multi-source coverage by careful analysis. Multiple discipline coverage is difficult to synchronize at the tactical level, however it is the only way to break down inconsistencies indicating surprise operations.(73)

A third consideration is using evaluators fresh to the data and setting to compare perceptions. This can be accomplished at the tactical level by use of intelligence specialists from different headquarters, use of front line commanders and staffs as evaluators, and finally the use of multi-disciplinary analysis teams with minimum "insider" socialization and conditioning.(74)

All of the above leads to the final point which is a need to improve the ability to predict. We must understand the limits of our reconnaissance and intelligence collection systems and do more than a superficial analysis of the measures directed toward surprise attack. We must learn to think primarily not about what was or even what is, but rather about that which will be. In order for our assumptions to possess a realistic foundation, we must eliminate subjectivism and base them chiefly not on intuition but rather on logical, dialectical, sober comprehension of the situation.(75) While this logical approach to intelligence production is easy to write about, the noise surrounding events on the battlefield, often makes it difficult to accomplish.

WORKING THROUGH THE NOISE TO PREVENT SOVIET SURPRISE

Understanding noise, which is competing and contradictory signals surrounding an event, is of great importance to both commanders and intelligence personnel.(76) The present intelligence collection system at corps and below has a great ability to collect in the multi-spectrum arena. We have developed along with this capability, systems to help the human analyst exploit this capability by focusing attention on items which analyst have identified as key. Each enemy course of action is broken down into indicators-steps which must be taken to realize this action, indicators into key activities, activities into actions we can observe. The result is a system of great power for focusing attention on significant pieces of information and for leading to conclusions of intent based upon a clear path of reasoning. The weakness of this system is that the discriminators at each step become high value targets for Soviet surprise operations. (77) The Soviets are very knowledgable of the sensors we use in the collection of this data and they have become the major targets for their deception operations.

To survive in this noise we must first look for these deceptive simulations using multi-sensor collectors as described earlier and accept the fact that warning signals at best are going to be ambiguous. This ambiguity in warning signal requires a lowering of the threshold of warning and an increasing in the tolerance to false alarms. Commanders and intelligence personnel should not be afraid, if the odds and warning indicate, to go to full alert and then have nothing happen. Troops once

educated and instructed to understand the reasons for these extra countermeasures will be prepared to pay the price of several false alerts rather than suffer the consequences of a surprise attack.(78)

ACTIONS LEADERS CAN TAKE TO PREVENT SURPRISE

Preventing surprise requires intelligence personnel and the commanders they support to create an environment for discovery. Commanders and intelligence officers must reduce the influence of their views and increase the flexibility of the workings within the organization. Intelligence organizations must allow and encourage skepticism, imagination and diverse interpretations for this aids the vigilance for surprise. Commanders and intelligence officers must all remain open to evidence and ideas that are in variance with their preconceptions.(79) Along with this, commanders must be careful not to be victims of the belief that if they receive more information then the probability of preventing surprise will increase. Decisions must be made quickly for history has shown that to wait is to be surprised. (80)

In developing plans to counter surprise, commanders must realize the limitations to reconnaissance and intelligence systems. Noise, as explained above, clouds the picture. However, even without any intent of the Soviets to deceive, the limitations of the intelligence process often leave us with an incomplete and sometimes misleading picture of his activities and

objectives.(81) Commanders must have a correct concept of what the enemy's intent is based on his capabilities to conduct an attack.

This is often further confused by what is called incremental pressure. P. H. Vigor in his book, Soviet Blitzkrieg Theory, provides an answer to why this threat is often ignored. Vigor explains: "Danger is that which moves.. once it has remained motionless for a sufficient period, even the most suspicious human will cease to worry about it. It will have become not merely part of the landscape, but a normal part of the landscape. And normalcy is not dangerous. Normalcy is the familiar, the ordinary, the safe."(82) Intelligence personnel and commanders must understand that normalcy is dangerous, and often is the preparation time for an attack.

OFFENSIVE COUNTER-MEASURES TO SURPRISE

Surprise attacks are always possible, therefore one must be prepared to fight under those conditions. Training and exercises should be conducted that practice reacting to surprise attacks. Intelligence and operations personnel must be able to convert ambiguous warning signals into appropriate plans. Soviet surprise doctrine which stresses speed of action requires the same speed in analysis and reporting to the command elements. Commanders must ensure that communication are maintained to pass information both up and to the troops. This requires that the need for security never overrides the need to have adequate communications between the commander and his elements.(83)

In order to prevent being taken by surprise the commander must not accept the mode of action forced by the enemy. U S forces are not trained in fighting a meeting engagement and can not successfully defend against a breakthrough operation without warning. The Soviets use of speed to achieve mass at the breakthrough point must be interrupted before it can gain momentum. U S forces must fight the deep battle effectively to prevent this massing.

The final action a commander should consider when indications are that an attack is eminent is the preemptive attack. A preemptive attack into a attacking Soviet force can disrupt his momentum and achieve the surprise he was seeking.(84)

COUNTERING SURPRISE

Surprise in and of itself can achieve nothing. What is important is that it confers the right conditions for a quick victory through the exploitation of initial success. To counter this the defender's strategy must be able to shift the conditions of surprise to his advantage.(85)

DEFENSE IN DEPTH

In order to regain the initiative the tactical commander must be able to absorb the initial surprise attack and blunt its momentum. Accomplishing this requires a well established and organized defense in depth with troops trained to execute the plan in an environment where confusion will be the norm.(86) Troops must be given prompt and full information on unexpected, surprise actions by the enemy with specification of its actual dimensions.(87) Additionally, they must understand the commanders intent and be trained to fight with limited information so they can react correctly if surprised.(88)

COMBAT READINESS

Units must be maintained in a high state of combat readiness, making it possible to neutralize the consequences of surprise quickly. This readiness

must focus not only on equipment, but on the troops to ensure a high degree of discipline, morale, and physical conditioning as exhausted, hungry, and cold troops succumb more easily to the fear and panic that surprise induces.(89) Military leaders, to prevent this fear, must understand the essence of fear and its mechanism of action, as well as the psychological means of neutralizing and eliminating it. Leaders must set a personal example of self-control, self-confidence and decisive actions. This example of composure is just as infectious as the fear of surprise and just as easily transmitted to those in the unit.(90)

RAPID COUNTER-MEASURES

U S force headquarters must train in making rapid situation estimates with the aim of determining the principal danger or threat.(91) This must be followed by a rapid utilization of available manpower and weapons, with a special emphasis on using those troops which have not been subjected to the surprise actions.(92) This new plan of defense, as well as the initial one, must ensure the enemies advances along the axis of breakthrough is slowed.(93) This slowing will result in two advantages. The first is a throwing off of the timetables of the advancing Soviet units resulting in stacking up of their forces for deep interdiction. The second is the ability then to counterattack and to go on the counteroffensive. This counterattack results in the best defense for surprise which is an attack to regain the initiative.

CONCLUSION

Several conclusions can be drawn from this assessment. First is that the Soviets have conducted extensive study on the theories, history and application of surprise operations. Their doctrine incorporates components of Eastern and Western theory and modern military history resulting in a multi-echelon approach. It is planned and controlled by the higher headquarters, which also allocates assets as required for the operation. This echeloning is the same as all Soviet operations with clearly defined roles at each level. To defeat this threat we must focus our limited intelligence assets understanding this.

We can expect the Soviet plan to use at least three of the separate elements of surprise independently or concurrently. In NATO, surprise may even be the difference between Soviet success or failure against our prepared defenses. To prosecute surprise and the resulting Soviet deep battle, emerging tactical doctrine and organizations are being structured with more maneuverable units which emphasize artillery and helicopter forces to enhance combat power.

To further support the achievement of a surprise attack the Soviets will continue to develop their strategic, operational and tactical maskirovka doctrine and capability.

Preventing Soviet surprise is possible with the present IEW system if certain considerations are observed. First, an understanding of what the enemy's options are based on logical, dialectical, sober comprehension is required. Secondly, is the understanding of the competing and contradictory

signals surrounding an event and human hindrances to accurate intelligence prediction such as faulty perception, preconception and inflexibility.

Finally, operations and intelligence personnel must develop plans which take into consideration that at best most information will be ambiguous.

We can defeat a Soviet surprise attack. However, it requires a detailed plan for defense in depth and well trained soldiers and staffs that can react quickly to the situation with appropriate counter-measures. Finally, tactical commanders must be prepared to take the offensive first, in response to their anticipation of a Soviet surprise attack.

Appendix A: Utilization of the Elements of Surprise by Case Type

Element of Surprise	"Strategic" Cases		"Tactical" Examples		Total	
	No.	%	No.	%	No.	%
Place	47	74.6	31	68.9	78	72.2
Time	46	73.0	25	55.6	71	65.7
Strength	38	60.3	24	53.3	62	57.4
Intention	29	46.0	7	15.6	36	33.3
Style	16	25.4	12	26.7	28	25.9

Reference: Barton Whaley, Stratagems: Deception and Surprise in War Vol. I.
(Naval War College, 1969) p 215.

Appendix B: Victorious use of the Elements of Surprise by Country

Element of Surprise	UK	GERMANY	SOVIET	USA
Place	59.6	44.2	57.1	73.3
Time	42.5	58.1	57.1	53.3
Strength	40.4	34.9	47.6	53.3
Intention	23.4	44.2	42.9	16.7
Style	25.5	30.2	23.8	23.3

Note: All numbers are percentages.

Original reference: Barton Whaley, Stratagems: Deception and Surprise in War Vol I, (Naval War College, 1969) compiled by Wayne J. Rowe, The Soviet Style of Surprise, (Naval Postgraduate School, 1985) p 42.

Appendix C: Number of Elements and Achievement of Victory of Surprise

# of Elements of Surprise	UK			GERMANY			SOVIET		
	used	victory	v/u%	used	victory	v/u%	used	victory	v/u%
Zero	9	5	55	6	3	50	2	2	100
One	9	5	55	6	5	83	4	3	75
Two	11	10	91	14	13	93	5	4	80
Three	13	13	100	13	13	100	7	7	100
Four	5	5	100	4	3	75	2	2	100
Five	0	0	0	0	0	0	1	1	100

# of Elements of Surprise	USA			TOTAL		
	used	victory	v/u%	used	victory	v/u%
Zero	4	2	50	21	12	57
One	3	3	100	22	16	73
Two	13	11	85	43	38	88
Three	5	5	100	38	38	100
Four	3	3	100	14	13	93
Five	2	2	100	3	3	100

Original reference: Barton Whaley, Stratagems: Deception and Surprise in War Vol. I, (Naval War College, 1969) compiled by Wayne J. Rowe, The Soviet Style of Surprise, (Naval Postgraduate School, 1985) p 44.

ENDNOTES

1. Maj. Gen. P.T. Kunitskiy, "Achieving Surprise from The Experience of The Great Patriotic War", USSR Report, (Oct 1985), p. 25
2. Col. I. Kuleszynski, "Some Problems of Surprise in Warfare", Voyennaya mysli, (March 1974), p. 487.
3. Ibid., p. 488.
4. Wayne James Rowe, "The Soviet Style of Surprise", Naval Postgraduate School, (June 1985), p 153.
5. Ibid., p. 20.
6. C. J. Dick, "Catching NATO Unawares: Soviet Army Surprise and Deception Techniques," International Defense Review, (January 1986), p. 23.
7. Rowe, "The Soviet Style of Surprise", p. 20.
8. Mao TseTung, "Selected Military Writings of Mao Tse Tung", U.S. Army Command and General Staff College, (Ay 87/88), p 239.
9. Ibid. p. 240.
10. Sun Tzu, The Art of War, (London, 1982), p. 45.
11. Ibid., p. 66.
12. Karl Clausewitz, On War, (Princeton University, 1984.) p. 198.
13. Baron de Jomini, "The Art of War", U.S. Army Command and General Staff College, (AY 87/88), p. 210.
14. Ibid., p 209.
15. Col. P. M. Simchenkov, " Achieving Covertness", USSR Report, (November 1986), p. 12-14.
16. Ibid., p. 12.
17. David M. Glantz, " Soviet Maskirovka in Transition: The Second Period of the Great Patriotic War ", Soviet Army Studies Office, (undated), p. 231
18. Ibid., p. 233.
19. Rowe, "The Soviet Style of Surprise," p. 39.
20. Ibid., p. 40 & 41.

21. Ibid., p. 41.
22. Ibid., p. 41.
23. Ibid., p. 41.
24. Ibid., p. 154.
25. Dick, "Catching NATO Unawares," p. 21.
26. Ibid., P. 21.
27. Ibid., p. 21.
28. Ibid., p. 21.
29. Ibid., p. 21.
30. U.S.Army, Field Manual 100-2-1, The Soviet Army, Operations and Tactics, (Washington, D. C. July 1984), p. 5-31.
31. Kunitskiy, "Achieving Surprise From the Experience of the Great Patriotic War," p. 29.
32. FM 100-2-1., p. 5-34.
33. Kunitskiy, "Achieving Surprise From the Experience of the Great Patriotic War," p. 31.
34. Maj Mgr Z. Paleski, "Psychological Aspects of Surprise," Voyennaya mysl, (July 1971), p. 505.
35. Maj Gen N. Vasendin and Col N. Kuznetsov, "Modern Warfare and Surprise Attack," Voyennaya mysl, (June 1968), p. 341.
36. FM 100-2-1., p. 5-32.
37. FM 100-2-1., p. 15-1&2.
38. Major General L. Korzun, "Achieving Surprise," Soviet Military Review, (November 1979), p. 16.
39. FM 100-2-1., p. 5-14.
40. Korzum, "Achieving Surprise," p. 16.
41. P.M. Simchenkov, "Deception During the Offensive," The Soviet Strategic View, (Fall,1986), p. 87.

42. Kunitskiy, "Achieving Surprise From the Experience of the Great Patriotic War," p. 29-30.

43. D.L. Smith and A.L. Meier, "Ogurkov's revolution: Soviet military doctrine for the 1990s." International Defense Review, (July 1987), p. 369.

44. Ibid., p. 873.

45. Kunitskiy, "Achieving Surprise from the Experience of the Great Patriotic War," p. 25.

46. U.S. Army, Field Manual 100-2-3, The Soviet Army, Troops, Organization and Equipment. (Washington, D.C. July 1984) p. 4-106,114,123.

47. Paleski, "Psychological Aspects of Surprise." p. 509.

48. Korzum, "Achieving Surprise," p. 17.

49. Knitskiy, "Achieving Surprise From the Experience of the Great Patriotic War" p. 28.

50. Ibid, p. 31.

51. Paleski, "Psychological Aspects of Surprise," p. 508.

52. FM 100-2-3., p. 3-5.

53. U.S. Army, Field Manual 100-2-2 The Soviet Army, Specialized Warfare and Rear Area Support. (Washington, D.C. July 1984) p. 13-142.

54. FM 100-2-1., p. 3-6.

55. Thomas E. Dixon and Donald E. Smith, "Deception as a Tactic in Soviet Military Thought." National War College, (1984,) p. 3.

56. Bruce R. Pirnie, " Soviet Deception Operations during World War II" U.S. Army Center of Military History, (1985,) p. 1.

57. Ibid., p. 1.

58. Ibid., p. 2.

59. Ibid., p. 2.

60. Roger Beaumont, " Maskirovka: Soviet Camouflage, Deception and Deception." Center for Strategic Technology, (1982), p. 4-41

61. Ibid., p. 4.

62. Kenneth C. Keating, "Maskirovka: The Soviet System of Camouflage," U.S. Army Russian Institute, (1981), p. 7.

63. Ibid., p. 11 & 12.

64. Ibid., p. 13.

65. Ibid., p. 14.

66. Rowe, "The Soviet Style of Surprise", p. 166.

67. Ibid., p. 162 & 163.

68. Ibid., p. 163.

69. Ibid., p. 168.

70. Vasendin, " Modern Warfare and Surprise attack", p. 345.

71. U.S.Army, Field Manual 34-1, Intelligence and Electronic Warfare Operations, (Washington, D.C.,August 1984), p. 2-8.

72. Kuleszynski, "Some Problems of Surprise in Warfare", p. 499.

73. Robert P. Goldsmith and Ralph F. Gerenz, "Techniques for Detecting Cover and Deception", Massachusetts Institute of Technology, (1983), p. 150.

74. Beaumont, " Maskirovka: Soviet Camouflage, Concealment and Deception," p. 39.

75. Kuleszynski. "Some Problems of Surprise in Warfare," p. 498.

76. Whlesteller, " Pearl Harbor: Warning and Decision," p. 3.

77. Goldsmith, "Techniques for Detecting Cover and Deception," p. 147.

78. Rowe, " Soviet Style of Surprise," p. 169.

79. Ibid., p. 171.

80. Ibid., p. 171.

81. Goldsmith, "Techniques for Detecting Cover and Deception," p. 145.

82. Peter H.Vigor, Soviet Blitzkrieg Theory, (New York,1983),p. 165-166.

83. Rowe. " Soviet Style of Surprise," p. 171.

84. Ibid., p. 172.

85. Vigor, "Soviet Blitzkrieg Theory," p. 146.
86. Rowe, " Soviet Style of Surprise," p. 173.
87. Kuleszynski, " Some Problems of Surprise in Warfare," p. 501.
88. Beaumont, " Maskirovka: Soviet Camouflage, Concealment and Deception," p. 40.
89. Kuleszynski, "Some Problems of Surprise in Warfare," p. 500.
90. Ibid., p. 501.
91. Beaumont, " Maskirovka: Soviet Camouflage, Concealment and Deception," p. 39.
92. Kuleszynski, "Some Problems of Surprise in Warfare," p. 501.
93. Rowe, "Soviet Style of Surprise," p. 173.

BIBLIOGRAPHY

BOOKS

Clausewitz, Karl. On War, edited and translated by Michael Howard and Peter Paret, Princeton University Press, Princeton, New Jersey, 1984.

Jomini, Baron De. The Art of War, U.S. Army Command and General Staff College, Ft. Leavenworth, Kansas, AY 87/88.

Sun Tzu. The Art of War, Oxford University Press, London, 1982.

Tsetung, Mao. Selected Military Writings of Mao Tsetung, U.S. Army Command and General Staff College, Ft. Leavenworth, Kansas, AY 87/88.

Whaley, Barton. Stratagem: Deception and Surprise in Warfare Vol. I and II, U S Naval War College, Newport, Rhode Island, 1969.

Vigor, Peter H. Soviet Blitzkrieg Theory, St. Martin Press, New York, 1983.

Wohlesteller, Rorerta, Pearl Harbor: Warning and Decision, Stanford University Press, Stanford, California, 1962

Zell, Stanley. An Annotated Bibliography of the Open Literature on Deception, Rand Corp., Santa Monica, California, 1985.

TRANSLATED BOOK

Matsulenko, V.A. Operational Camouflage of Troops, Translated by DCITRAN, Santa Barbara, California, 1977.

REPORTS

Beaumont, Roger. Maskirovka: Soviet Camouflage, Concealment and Deception, Texas A&M University, College Station, Texas, 1982.

Campbell, Maj (P) Charles. Surprise: The Precursor to Soviet Operational Success, School of Advances Military Studies, U.S. Army Command and General Staff College, Ft. Leavenworth, Kansas, 1986.

Dixon, Thomas E. and Smith, Donald E. Deception as A Tactic in Soviet Military Thought, The National War College, National Defense University, Washington, D.C. 1984

Glantz, Col. David M. Soviet Defensive Tactics at Kursk, Combat Studies Institute, U.S. Army Command and General Staff College, Ft. Leavenworth, Kansas, 1986.

Glantz, Col. David M. Soviet Maskirovka in Transition: The Second Period of the Great Patriotic War, Soviet Army Studies Office, Ft. Leavenworth, Kansas. 1987.

Goldsmith, Robert P. and Gerenz, Ralph F. Techniques for Detecting Cover and Deception, Massachusetts Institute of Technology, Cambridge Massachusetts 1983.

Keating, Maj Kenneth C. Soviet System of Camouflage, U.S. Army Russian Institute, Garmish, Germany, 1981.

Pirnie, Maj Bruce R. Soviet Deception Operations During World War Two, U.S. Army Center of Military History, Washington, D.C. 1985.

Rowe, Wayne James. The Soviet Style of Surprise, Naval Postgraduate School, University of Connecticut, 1972.

Soviet / Warsaw Pact Division. A Soviet View on Surprise Air Attack, Director for Intelligence Research, Defense Intelligence Agency, Washington, D.C. 1977.

TRANSLATED ARTICLES

Korzum, Major General L. Achieving Surprise, Soviet Military Review, Moscow, USSR. 1979.

Kuleszynski, Col I. Some Problems of Surprise in Warfare, Vovennaya mysl, Moscow, USSR. 1974.

Kunitskiy, Maj. Gen. P.T. Achieving Surprise From the Experience of the Great Patriotic War, USSR Report, Springfield, Virginia. 1986.

Paleski, Maj Mgr Z. Psychological Aspects of Surprise, Vovennaya mysl, Moscow, USSR. 1970.

Rotnistrov, Marshal Alekcevick. Role of Surprise, Vovennaya mysl, Moscow, USSR. 1955.

Simchenkov, Col P.M. Achieving Covertness, USSR Report, Springfield, Virginia. 1986.

Simchenkov, Col. P.M. Deception During the Offensive, Soviet Strategic Review, Moscow, USSR. 1986.

Sobik, Col Erich. Surprise,Cunning, Camouflage, and Deception in the Soviet Army: (Part II)--What Conclusions Can Be Drawn?, US ARMY Foreign Science and Technology Center, Charlottesville, Virginia. 1983.

Sverdlov, F. Problems in Supporting Combat Operations Camouflage, Naval Intelligence Support Center, Washington D.C. 1984.

Vasendin, Maj Gen. N and Kuznetsov, Col N. Modern Warfare and Surprise Attack, Voyennaya Mysl, Moscow, USSR. 1969.

ARTICLES

Dick, C.J. Catching NATO Unawares, International Defense Review, 1986.

Dick, C.J. "Soviet Operational Manoeuvre Groups: A Closer Look", International Defense Review, 1983.

Hines, John G and Peterson, Phillip A. Changing the Soviet System of Control, International Defense Review, 1986.

Keltner, Lt. Kenneth M. and Turbiville, Graham H. Military Review, 1987.

Smith, D.L. and Meier A.L. Ogarkov's revolution, International Defense Review, 1987.

MANUALS

Field Manual 34-1, Intelligence and Electronic Warfare Operations, Washington, D.C: HQ Department of the Army, 1984.

Field Manual 100-2-1, The Soviet Army, Operations and Tactics, Washington, D.C: HQ Department of the Army, 1984.

Field Manual 100-2-2, The Soviet Army, Specialized Warfare and Rear Area Support, Washington, D.C: HQ Department of the Army, 1984.

Field Manual 100-2-3, The Soviet Army, Troops, Organization and Equipment, Washington, D.C: HQ Department of the Army, 1984.

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